



Welcome to the Globe District Annual Snow Meeting

- 1:00 to 1:15 (Sign In) Welcome Richard Powers, Globe District Engineer
- 1:15 to 1:20 Introduction of Agencies/Groups/Individuals
- 1:20 to 1:30 Short/Long term Weather Outlook
- 1:30 to 2:00 Slide Presentation
- 2:00 to 3:00 Open Session Questions/Answers



GLOBE DISTRICT WINTER STORM MANAGEMENT PLAN 2005/2006

- Arizona Department of Transportation
- Intermodal Transportation Division





•ADOT'S MISSION

- **Provide a safe and reliable surface for public vehicular use.**
- **Do all that is reasonably possible to keep the highway open and available to the prudent driver.**
- **Acknowledge that temporary road closures may be required during severe weather conditions.**
- **Maintain a sensitivity to the environment while utilizing anti/ de-icing agents.**
- **Keep the safety of the public and our employees priority ONE!**



Globe District Snow Guideline General Purpose Statement


The purpose of winter storm maintenance is to provide as safe and reliable travel surface as possible, utilizing the available resources as needed and where needed.

Actual use of personnel, equipment, de-icing agent and abrasives may vary from storm to storm, in order to optimize resources.



EXPECTATIONS:

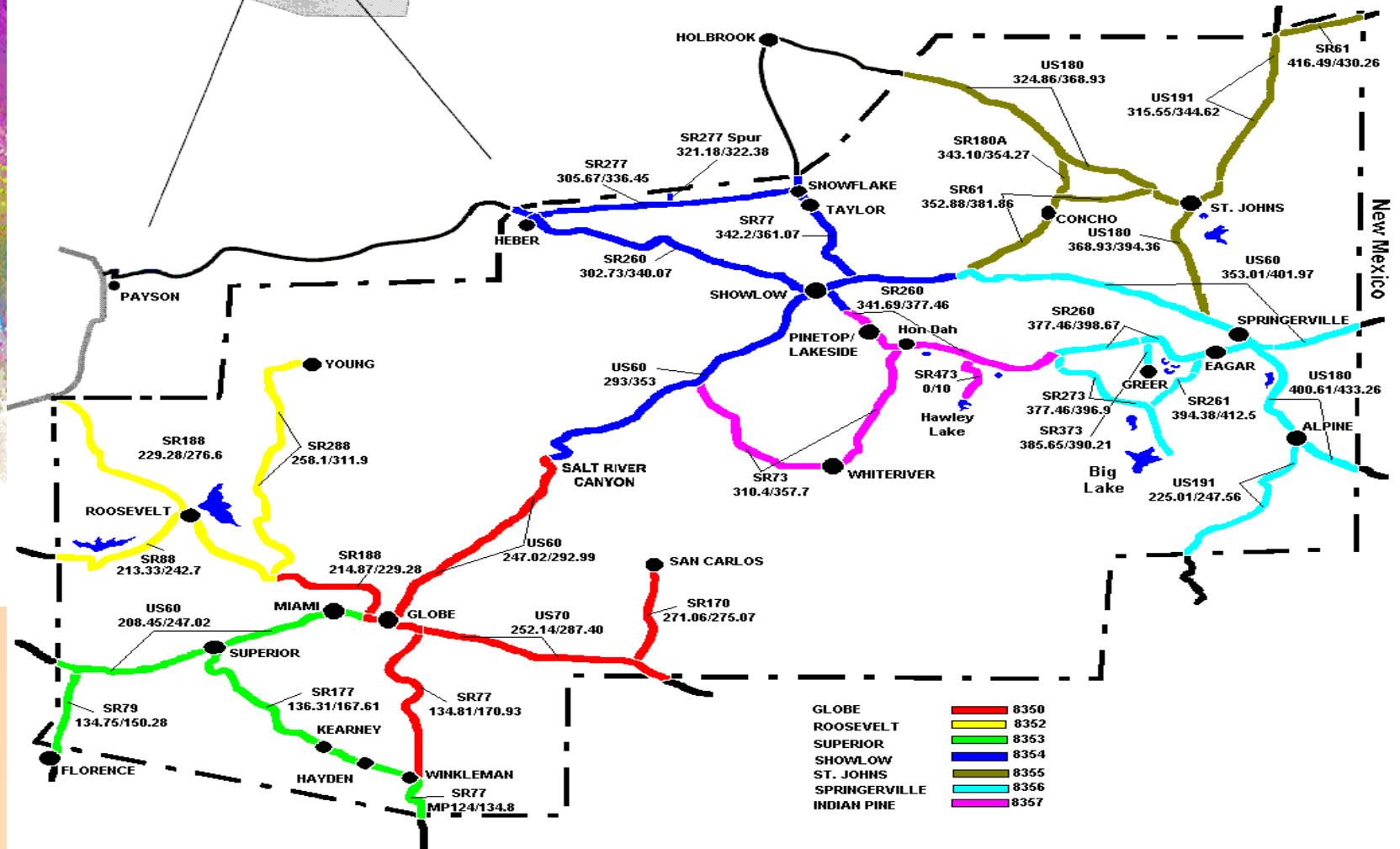
- **Drivers expect to drive on clear pavements, even during winter storms.**
- **Snow and ice must be cleared quickly, economically and efficiently.**
- **A plan must be developed to provide the safest highways possible for the prudent motorist.**
- **The level of service determined in most plans will depend on many factors: budget, equipment, manpower, politics and motorists' demands.**
- **This plan provides an overview of the issues involved in effective snow and ice control to restore safe and passable roads during and after winter storms.**



The Globe District is comprised of six maintenance orgs which are located in Globe, Roosevelt, Superior, Show Low, St. Johns, Springerville & Indian Pine.

- Globe holds 296 miles of roadway with a crew of 10 people.
- Roosevelt holds 182 miles of roadway of which is mostly gravel road with a crew of 9 people.
- Superior holds 220 miles of roadway with a crew of 9 people.
- Show Low holds 367 miles of roadway with a crew of 11 people.
- St. Johns holds 300 miles of roadway with a crew of 9 people.
- Springerville holds 330 miles of roadway with a crew of 12 people.
- Indian Pine holds 250 miles of roadway with a crew of 8 people
- **District wide 1000 center line miles of roadway to plow with 69 operators.**
- Have had to reduce 3 plus lost 2 more by re-establishing supervisor in Indian Pine.
- **(Had 82 in 01/02 & 78 in 02/03 & 67 03/04 & 73 04/05)**

GLOBE DISTRICT ORG ROUTE DESIGNATIONS





DEFINED PRIORITIES FOR ROUTES:

– I. Interstate highways, freeways, and other highways carrying over 3500 ADT

- ☐ • Highways carrying over 3500ADT and/or having great economic importance to the local community.
- ☐ • Snowplowing and anti icing efforts will be ongoing or until they become ineffective at which time abrasives will be applied to improve traction
- ☐ • These routes are to be maintained at the highest level practical within the given resources available.
- ☐ • Anti and De-icing efforts will continue until near normal surface conditions are restored.

– II. Highways carrying 1000 to 3500 ADT

- ☐ • Highways carrying 1000 to 3500 ADT or highways in extreme climate areas that are required to be open year round.
- ☐ • These roads will receive coverage during storms, or during drifting conditions or when the road conditions require tire chains or four wheel drives.
- ☐ • Snowplowing and anti icing efforts will be ongoing or until they become ineffective at which time abrasives will be applied to improve traction.
- ☐ • Anti and De-icing efforts will continue until near normal surface conditions are restored.



III. Highways carrying less than 1000 ADT

- These roads will normally receive coverage during storms or drifting conditions, as resources are available.
- Snowplowing and anti icing efforts will be ongoing or until they become ineffective at which time abrasives will be applied to improve traction These efforts will normally be limited to daytime coverage.
- In the case of extreme weather conditions, where additional coverage is required to keep the route open, this coverage may be extended if resources are available.
- These routes may be closed until storm passes if resources are required to keep priority I and II routes open. If closed the route will be patrolled and inspected per these guidelines.

IV. Highways that have very low ADT.

- Provide no maintenance service during the storm and plow snow only during regular working hours.
- These routes will be patrolled and inspected per these guidelines when closed.

V. Highways that are seasonal routes.

- They are to be closed for the winter and patrolled and inspected per these guidelines when closed.



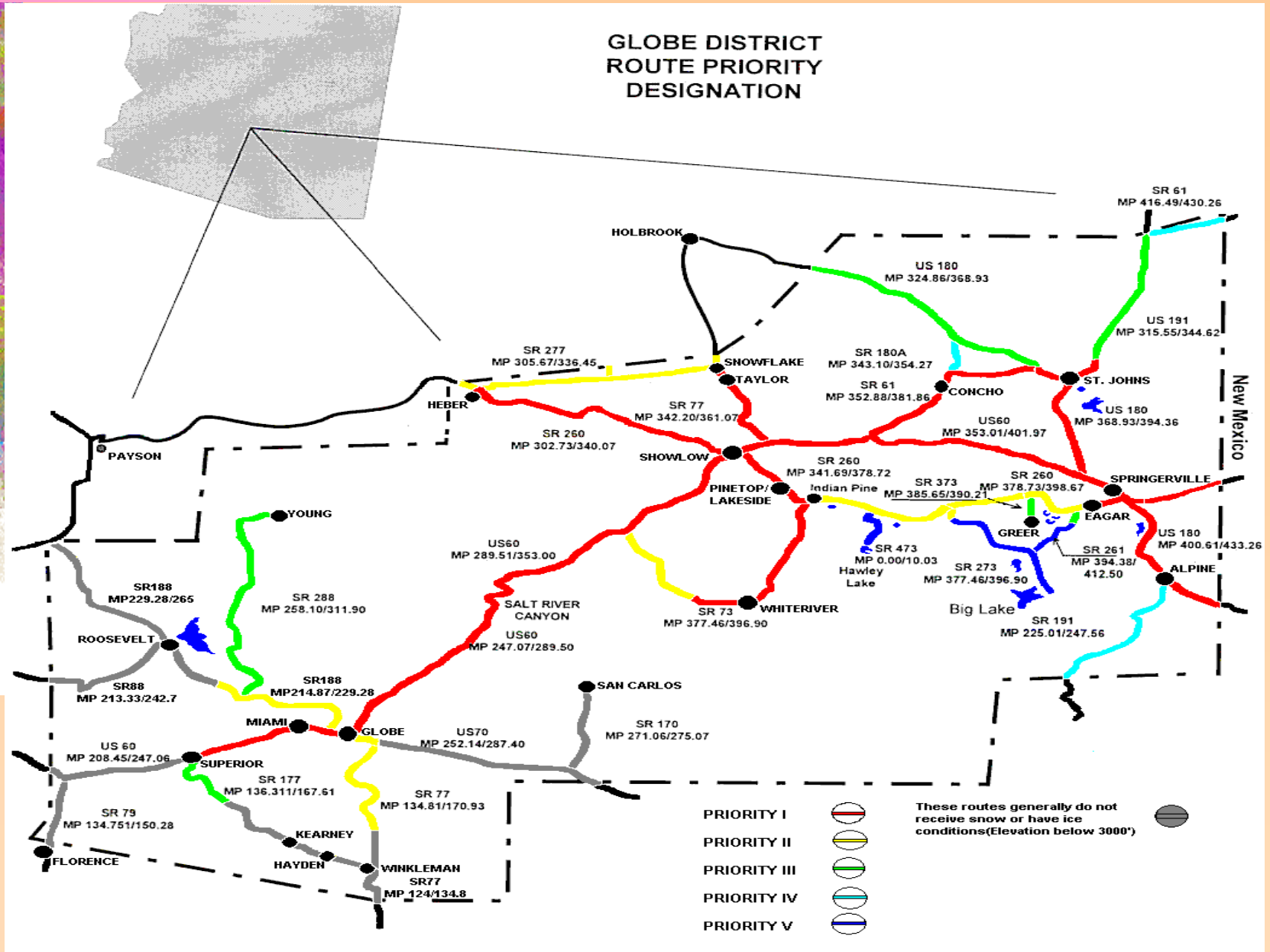
When will Snow Fighting Begin!

The Highway Maintenance Supervisors will be primarily responsible for determining when snow and ice control operations are to commence. They will monitor weather forecasts provided by Weather Vendor's and local forecasts, current weather conditions, and road conditions. They will alert crews and commence operations based on their information and judgment in accordance with the Globe District Snow Plan.



Before the snow gets this deep for sure.

PRIORITY ROUTES

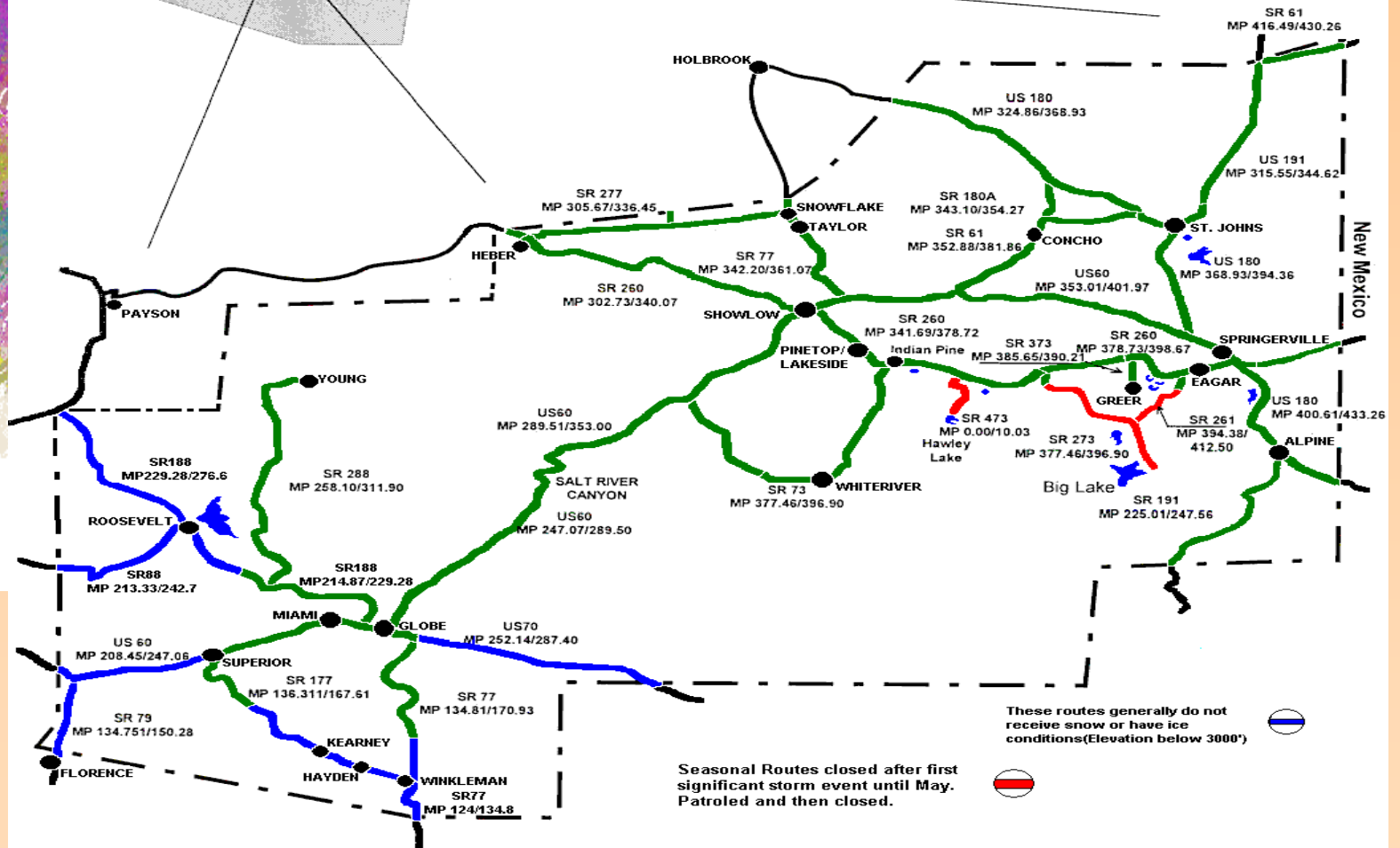




Removing snow on seasonal routes is a thing of the past!



Globe District Org Boundries During Snow Fighting Activities



Snow Accumulation...



Visibility and...



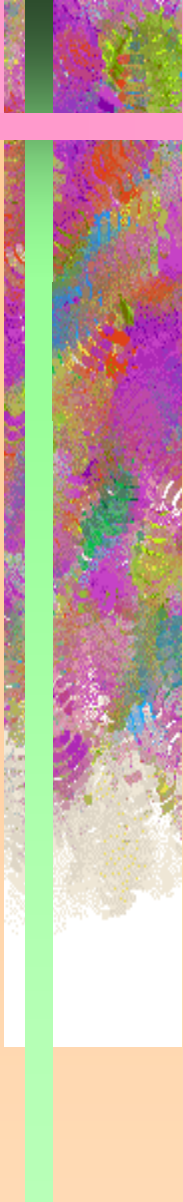
Equipment availability
impact time it takes to clear
roadways.



WEATHER AND ROAD CONDITION REPORT

- The road and traffic condition reporting codes are as follows:

| <u>Condition code</u> | <u>Definition</u> | <u>Example</u> |
|-----------------------|---|--|
| – 15 | Roadway, Traffic and weather are normal. | |
| – 14 | Roadway and traffic are affected to a minor degree by the weather conditions. | Minor snow fall or rainfall is occurring, visibility is slightly affected, and there may be isolated icy spots on the roadway. |
| – 13 | Roadway and traffic are affected by weather conditions. | Traffic has slowed down due to visibility and road conditions. There is ice and snow pack on more than 50% of the roadway. |

- 
- **12** **Roadway and traffic are severely affected by weather conditions.** **Snow tires and chains are required, visibility is severely limited, drifting is prevalent through out the section.**
 - **11** **Road is closed.**
 - **When condition codes 11 through 14 are used, the highway route number and the milepost limits shall be reported also. An example would be a condition 13 on SR260, MP 341.7 to 378.7.**
 - **When condition returns to normal, this must be called in to take restriction off and ensure accuracy of our HCRS reporting.**
 - **Any condition, which restricts traffic flow on the highway, should be included on this report; this includes restrictions on weight, and height of vehicles.**



Priority Activities District Wide

First priority

- Pre-treating roadways with anti-icing agents prior to storm event.
- Applying anti-icing agents on priority 1&2 routes.
- Regulating snow and ice control warning signs and devices. This includes permanent VMS in Show Low, Globe and near Florence Jct.
- Keeping the highway open and traffic moving; even if at a greatly reduced speed.
- Keeping priority 1 & 2 roadways open with one lane in each direction.

Second priority

- Keeping all traffic lanes open and traffic moving.
- Address snow-pack and icy spots utilizing available resources on priority 1 & 2 roadways including de-icing techniques to eliminate snow pack and icy spots.



Third priority

- Clear and re-open any priority 3 & 4 roadways as resources become available.

Forth priority

- Plowing snow from breakdown lanes, shoulders, and rest area roadways and parking areas.
- De-ice any remaining snow pack and icy spots and monitor drifting areas until condition is resolved.

Fifth priority

- Removing snow windrows from urban areas and sidewalks.
- Blowing snow from shoulders and widening cut/roadway sections that have excessive accumulation.

Resource availability will be updated annually.





This piece of equipment cost \$1,092.75 per month with the hourly rate of \$286.71.

If we run this for 20 hours it cost \$6,826.95.

Ever important process: Communications with DPS and other Law Enforcement Agencies

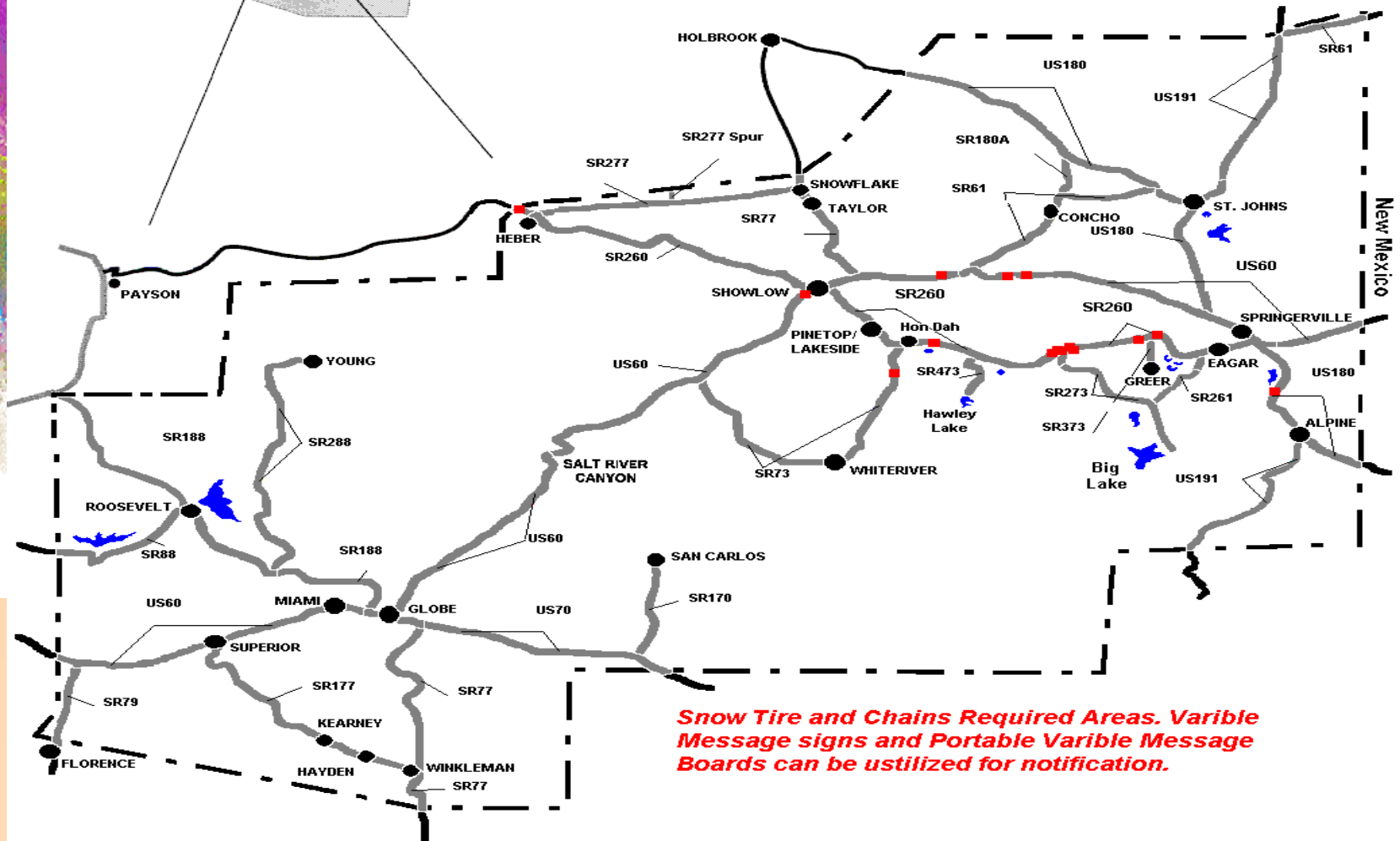




Travelers' Accidents

- During a storm event when encountering an incident involving a public vehicle (i.e. wreck, slide off, or rollover), the operator shall make a decision as to what action to take, whether to call in the accident and keep going, or stop and assist. This decision will be based on the current conditions of the roadway surface and severity of the storm and the accident at the time.
- Operators will call Snow Desk/TOC to confirm it has been reported to DPS.
- Operators will not assist motorist by pushing or pulling any private vehicle.
- **Keeping the roads passable is the operators primary function.**
- When responding to emergency calls from law enforcement, operators must keep their primary goal in mind.
 - When responding to these calls operators will do all they can to reduce the time away from your primary function of keeping the roads passable.
 - Clean up the location and apply abrasives and/or de-icers as quickly as possible.
 - Assist only as long as absolutely required to get the area secured and then return to your primary function.

Globe District Chain-up Areas



Internet Site for ADOT

www.az511.com <http://www.az511.com> In Newspaper Article

Excess internet and search for ADOT the Home page should come up.

Arizona Department of Transportation Home Page

Traffic Conditions

Welcome to Arizona Dept. of Transportation/Intelligent Transportation System

Enter

Roadway Conditions

Closures & Restrictions- Map of Arizona comes up with Icons all over it.

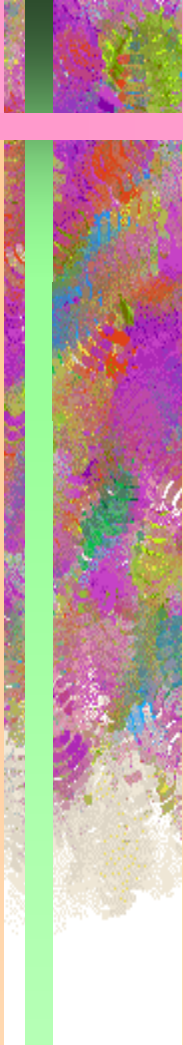
Select a Quadrant

For the Globe District select- Central East Arizona

Click on Icon-these icon's show weather,
roadway conditions, construction restrictions, maintenance activities, RWIS sites.

CLOSURE AND INSPECTION PROCEDURES DUE TO SNOW STORM

- **When it becomes necessary to close and barricade a highway because of snowstorm conditions, the following steps must be taken:**
 - **1.** The Department of Public Safety shall be notified IMMEDIATELY. Provide the affected route and milepost where the barricades are to be placed. Also notify the Superintendent, Regional Engineer and District Engineer, appropriate County Sheriff's Office, Central Maintenance and Traffic Operations Center in Phoenix (1-800-379-3701).
 - **2.** Coordinate closure with adjacent Highway Maintenance Supervisor's, if the affected length of highway involves more than one maintenance section or district so that both ends of the highway is closed as near simultaneously as possible.
 - **3.** Utilize Type III Barricades with flashing lights for closure points with appropriate advance warning signs.
 - **4.** After the closure has been completed, the entire length of closed highway must be inspected for stranded motorists as soon as possible. Any feasible means of transportation (snowplow, four-wheel drive vehicles, snowmobile, snow shoes, airplane, helicopter, etc.) should be used. Department of Public Safety and local law enforcement agencies may be contacted for assistance.
 - **5.** On lengths of highways where yearlong permanent residences exist or where other roadways access the closed portion of the highway additional inspections for stranded motorists may be conducted. Coordinated with the Department of Public Safety and/or local law enforcement agencies will be done to address any party that has ignored the posted closures on these routes.



–6. All new or updated information on all road miles should be phoned or radioed to the District during normal working hours approximately every hour (every two hours at the minimum) during snowstorms. All information shall be updated on HCRS (Highway Closure Restriction System).

–7. The inspection will be documented in writing on a completed Crew Work Report.

–The documentation should include:

- -Date of inspection
- -Route inspected
- -Beginning and ending mileposts
- -Name of person(s) who made the inspection
- -Results of inspection
- A typical entry might read:

–“Route 191 was inspected between MP 225 and 247.6 on 12/15/05 for stranded motorists. Two people were found at MP 230.1 and taken to Alpine. Snow depth averaged two feet with ten-foot drifts MP 228 to 246. Expect highway to re-open 12/16/98 in P.M. John Doe made the inspection.”

This much snow will close the road!



To Big Lake

261

MP
401.6

ROAD
CLOSED

BARRIER

409

Road Closed
1500 FT.
Road Closed
2 MILES AHEAD

Forest
Service
Parking/
Staging
Area

MP
401.87
MP
403.70

S.R. 261 WINTER ROAD CLOSURE SIGNING



NO WINTER
MAINTENANCE
NOVEMBER
TO MAY

MP
411.61

REGIONAL ALERT
ICE MAY BE
PRESENT ON
ROADWAY

MP
411.81

Mexican Hay Lake

261

MP
412.30

ROAD CLOSED
11 MILES AHEAD

ROUTE NOT SNOWPLOWED
OR PATROLLED
NIGHTS-WEEKENDS
DURING STORMS

MP
412.45

THIS IS NOT
A ROUTE TO
SUNRISE SKI AREA

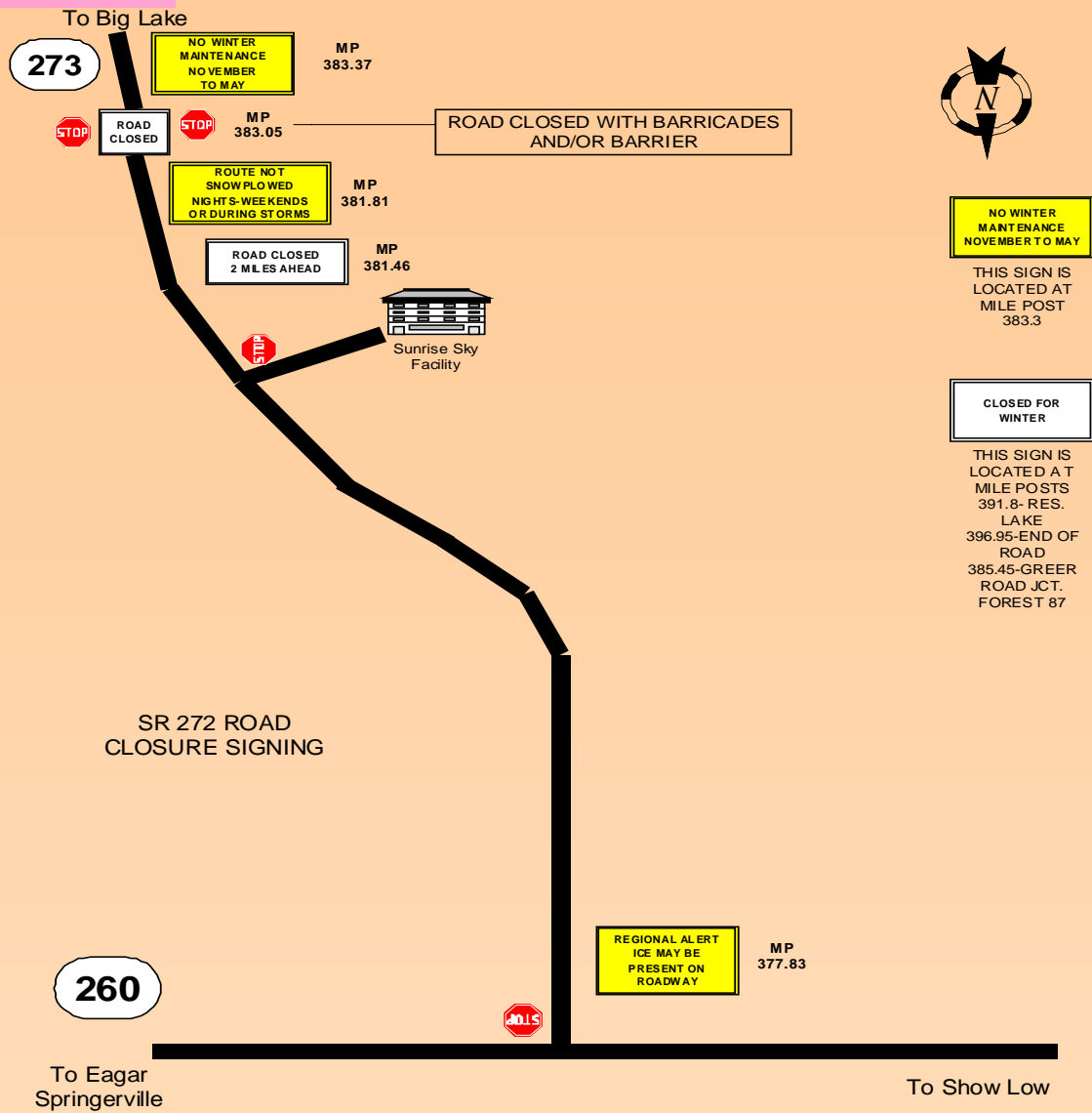
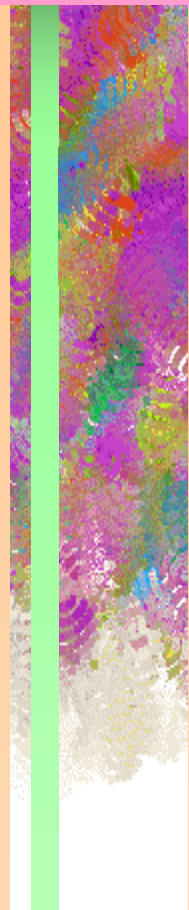
MP
412.5

260



To Eagar/
Springerville

To Show Low



S.R. 473 WINTER ROAD
CLOSURE SIGNING



473

BARRIER

ROAD
CLOSED



REGIONAL ALERT
ICE MAY BE
PRESENT ON
ROADWAY

MP
411.81

ROUTE NOT SNOWPLOWED
OR PATROLLED
NIGHTS-WEEKENDS
DURING STORMS

MP
412.45

ROAD CLOSED
AHEAD

MP
412.30

NO WINTER
MAINTENANCE NOVEMBER
TO MAY

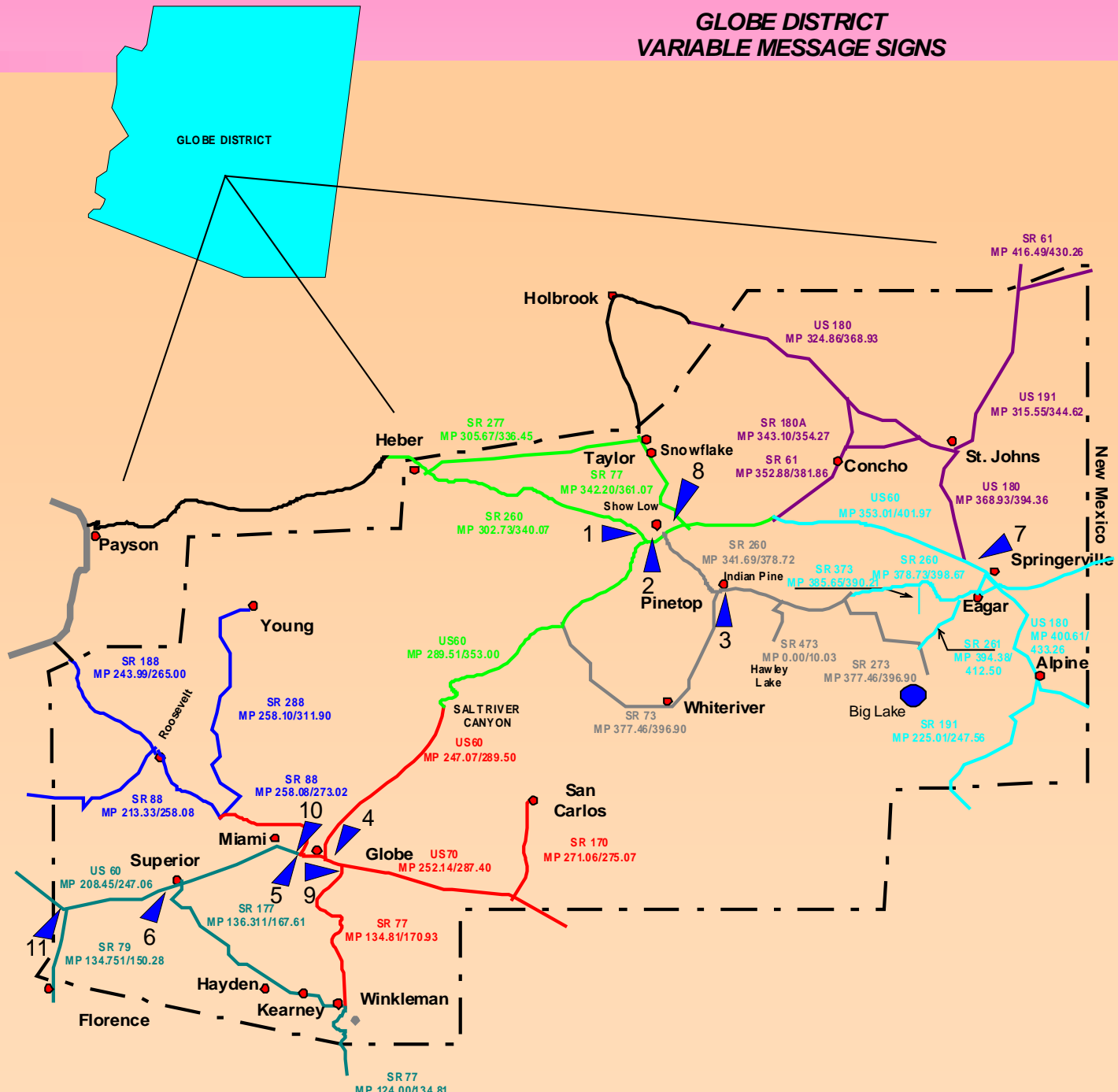
MP
412.5

To Eagar/
Springerville

260

To Show Low

GLOBE DISTRICT VARIABLE MESSAGE SIGNS





Just a bit tough to do
this;

When dealing with
this!





Let us end with SAFTEY!!!!!!!

We are working in the worst of conditions trying to make the roadways passable for those using them, stay alert and stay alive!

Our Operators are our most valuable resource and without them everyone could be in jeopardy.



The End

A landscape photograph showing a sunset or sunrise over a mountain range. The sky is filled with dramatic, layered clouds in shades of orange, yellow, and grey. The sun is visible as a bright glow on the horizon, partially obscured by the dark silhouette of the mountains. The foreground is a dark, flat expanse, possibly a field or a body of water, reflecting the light from the sky. The overall mood is serene and contemplative.



Thank You...

Questions?